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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,995

01/16/2004

Yong-sok Yang

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STAAS & HALSEY LLP

SUITE 700

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EXAMINER

GARCIA JR, RENE

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/757,995	Applicant(s) YANG, YONG-SOK	
	Examiner Rene Garcia, Jr.	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-8, 10, 11, 20, 25, 26, 31, 34, 35, 50 and 51 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 16, 23, 24, 27-30, 32, 33 and 36-49 is/are allowed.
- 6) ☒ Claim(s) 9, 12-14, 17-19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9, 12, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinada et al. (US 6,502,917) in view of Jones (US 2002/0146267).

#### **Shinada et al. discloses the following claimed limitations:**

\*regarding claims 9 and 19, carriage/**3/** (fig. 1; col. 3, lines 21-29) for an ink cartridge/**40/** of an image forming apparatus/**ink-jet printing apparatus/** comprising:

\*carriage body/**holder, 4/** having a mounting portion, in which the ink cartridge/**40/** having a latching portion/**overhang, 46/** (fig. 8; col. 3, lines 45-52) is accommodated

\*latch/**lever, 11/** rotatably disposed at the carriage body/**4/** to close the mounting portion by locking, that when unlocking with respect to the carriage body, draws the ink cartridge out of the mounting portion (fig. 8; col. 6, lines 35-41)

\*resilient latch member/**plate spring, 70/** (fig. 8; col. 8. lines 28-34) to resiliently bias the latch in an opening direction

\*locking unit/**hook portion, 18 & hook, 16/** (col. 3, lines 45-52) to lock the latch to the carriage body (fig. 2, 3)

\*regarding claim 12, wherein the locking unit comprises:

\*release handle to release the hook member/**18/** from the locking projection/**16/** (fig. 3; to disengage hook/**16/** and hook portion/**18/** it is necessary to push in a right direction the portion of lever/**11/** above hook portion/**18/**)

\*further regarding claim 19, carriage body movable on a guide rail (fig. 1; carriage need to traverse medium in a scanning direction and known in art to utilize a rail or rod for such purpose)

\*regarding claim 21, plunger/**elastic member, 21/** (fig. 3; col. 3, lines 54-64), wherein the plunger is integrally formed with the latch and the plunger elastically deforms to secure the ink cartridge in a mounted position when the latch closes the opening

**Shinada et al. does not disclose the following claimed limitations:**

\*regarding claim 9 and 19, locking unit includes a locking projection disposed at a sidewall of the carriage body and a hook member hinged on the latch and selectively hooked into the locking projection

**Jones discloses the following claimed limitations:**

\*regarding claim 9 and 19, locking unit/**latch assembly, 150/** (§0018, 0028; fig. 4, 5,8,9) includes a locking projection/**latch tabs, 157/** (§0028; fig. 4) disposed at a sidewall/**side walls, 133, 134)** of the carriage body/**carriage, 119/** and a hook member/**latch hooks, 155/** (§0028; fig. 4) hinged (latch hooks/**155/** are apart of second leg/**151b/** which has a degree of motion §0033 to allow for movement of latch hooks to engage latch tabs) on the latch/**latch assembly, 150**

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**including: latch support arm, 151; first leg, 151a; second leg, 151b/ (¶0028; fig. 8) and selectively hooked into the locking projection (fig. 8, 4; ¶0031-0033)**

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize locking unit that includes a locking projection disposed at a sidewall of the carriage body and a hook member hinged on the latch and selectively hooked into the locking projection for the purpose of accurately positioning the print cartridge to the carriage.

3. Claims 13, 14, 17 & 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinada et al. (US 6,502,917) as modified by Jones (US 2002/0146267) in view of Miyazawa et al. (US 6,250,750).

**Shinada et al. as modified by Jones discloses all the claimed limitations except for the following:**

\*regarding claim 13, sliding unit that limits an opening angle of the latch with respect to the carriage body

\*regarding claim 14, sliding unit comprises: a sliding protrusion disposed on the latch; and a sliding hole portion disposed on the carriage body opposite to the sliding protrusion, to accommodate the sliding protrusion

\*regarding claim 17, first imaginary line, which is parallel to an upper surface of the latch in a locked position

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\*second imaginary line, which is parallel to the upper surface of the latch in an opened position

\*form an interior angle ranging from about 20° to about 30°

\*regarding claim 18, interior angle is approximately 21°

**Miyazawa et al. discloses the following:**

\*regarding claim 13, sliding unit that limits an opening angle of the latch with respect to the carriage body (fig. 12a-c; col. 8, lines 40-56)

\*regarding claim 14, sliding unit comprises: a sliding protrusion/**lifter, 115/** disposed on the latch/**cover body, 110/**; and a sliding hole portion disposed on the carriage body opposite to the sliding protrusion, to accommodate the sliding protrusion (fig. 12a; portion where lifter/115/ and cover body/110/ meet [hinge])

\*regarding claim 17, first imaginary line, which is parallel to an upper surface of the latch in a locked position

\*second imaginary line, which is parallel to the upper surface of the latch in an opened position

\*form an interior angle ranging from about 20° to about 30° (as seen in fig. 12a the angle between a closed/**first imaginary line/ [locked] position** and fully open position/**second imaginary line/ of cover body/110/** is 90°; however particular open position has not been defined to regards to an exact position therefore since the range of the angel between closed [locked] and fully open

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is 0°-90° it can also form an angle of 20°-30°)

\*regarding claim 18, interior angle is approximately 21° (same argument as with regards to claim 17)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize sliding unit that limits an opening angle of the latch with respect to the carriage body; sliding unit comprises: a sliding protrusion disposed on the latch; and a sliding hole portion disposed on the carriage body opposite to the sliding protrusion, to accommodate the sliding protrusion; first imaginary line, which is parallel to an upper surface of the latch in a locked position, second imaginary line, which is parallel to the upper surface of the latch in an opened position, form an interior angle ranging from about 20° to about 30°; and interior angle is approximately 21° as taught by Miyazawa et al. into Shinada et al. as modified by Jones for the purpose providing the cover body/latch/ with a defined open/close path that limits how open the cover body/latch/ can be.

#### *Response to Arguments*

4. Applicant's arguments filed 14 June 2007 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., page 13 [top of page] regarding "hook partition Is not rotatably disposed"; rotatably and hinged are similar but hinged only requires the capability to allow relative motion between objects, does not necessarily imply rotation; therefore Jones teaches such limitation of "hinged") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

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from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

5. Applicant's arguments with respect to claims 9 and 19 have been considered but are moot in view of the new ground(s) of rejection. Jones teaches the amended claim limitations as outlined above, specifically regarding hook member being hinged to latch.

***Allowable Subject Matter***

6. Claims 15,16,23,24,27-30,32,33 and 36-49 allowed, for reasons stated in office action dated 23 February 2007 specifically regarding previous independent claims 15 and 23, now in independent form with the other above listed claims dependent from one or the other.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jones et al. (US 6,655,793) teaches a front portion/leg of latch/ which is hinged off of the latch for an alternate use of a latching system. This alternative also teaches the "rotatably" feature of the hook member suggested (but lacked specific claim recitation) in arguments dated 14 June 2007 on page 13 of applicant.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period



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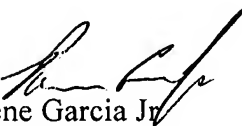
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


*Communication with the USPTO*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Rene Garcia Jr.  
09/07

  
STEPHEN MEIER  
SUPERVISORY PATENT EXAMINER